

# **Eco Audit Report**

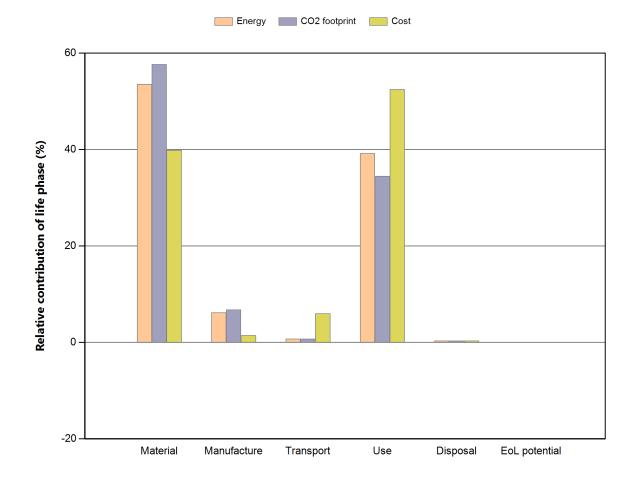
Product name Beschermkap S235

Country of manufacture World

Country of use World

Product life (years) 10

#### **Summary:**



#### Energy details CO2 footprint details Cost details

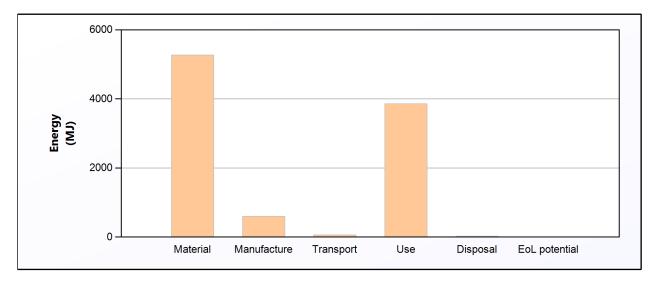
Phase	Energy (MJ)	Energy (%)	CO2 footprint (kg)	CO2 footprint (%)	Cost (EUR)	Cost (%)
Material	5.28e+03	53.6	388	57.6	112	39.8
Manufacture	610	6.2	45.6	6.8	4	1.43
Transport	69.6	0.7	5.01	0.7	16.7	5.96
Use	3.86e+03	39.2	232	34.5	147	52.5
Disposal	32.2	0.3	2.25	0.3	0.885	0.316
Total (for first life)	9.85e+03	100	673	100	280	100
End of life potential	0	_	0			·



# **Eco Audit Report**

### **Energy Analysis**

Summary



	Energy (MJ/year)
Equivalent annual environmental burden (averaged over 10 year product life):	985

### Detailed breakdown of individual life phases

Material: Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass processed** (kg)	Energy (MJ)	%
Sheet metal	Carbon steel, AISI 1022, as rolled	Virgin (0%)	0.7	230	1.7e+02	5.3e+03	100.0
Total				230	1.7e+02	5.3e+03	100

<sup>\*</sup>Typical: Includes 'recycle fraction in current supply'

### Manufacture: Summary

Component	Process	% Removed	Amount processed	Energy (MJ)	%
Sheet metal	Roll forming	1	1.7e+02 kg	5.6e+02	92.1
Sheet metal	Fine machining	5	8.5 kg	43	7.0
Galvanize	Electroplating	-	0.06 m^2	5.3	0.9
Total				6.1e+02	100

<sup>\*\*</sup>Where applicable, includes material mass removed by secondary processes

Transport:

### Breakdown by transport stage

Stage name	Transport type	Distance (km)	Energy (MJ)	%
Transport to customer	14 tonne (2 axle) truck	15	3.6	5.2
Costumer to end-user	40 tonne (6 axle) truck	5e+02	66	94.8
Total		5.2e+02	70	100

### **Breakdown by components**

Component	Mass (kg)	Energy (MJ)	%
Sheet metal	1.6e+02	70	100.0
Total	1.6e+02	70	100

Use:

#### Static mode

Energy input and output type	Electric to mechanical (electric motors)
Country of use	World
Power rating (W)	5
Usage (hours per day)	24
Usage (days per year)	3.7e+02
Product life (years)	10

### Relative contribution of static and mobile modes

Mode	Energy (MJ)	%
Static	3.9e+03	100.0
Mobile	0	
Total	3.9e+03	100

Disposal:

Component	End of life option	% recovered	Energy (MJ)	%
Sheet metal	Landfill	100.0	32	100.0
Total			32	100

### **EoL** potential:

Component	End of life option	% recovered	Energy (MJ)	%
Sheet metal	Landfill	100.0	0	
Total			0	100

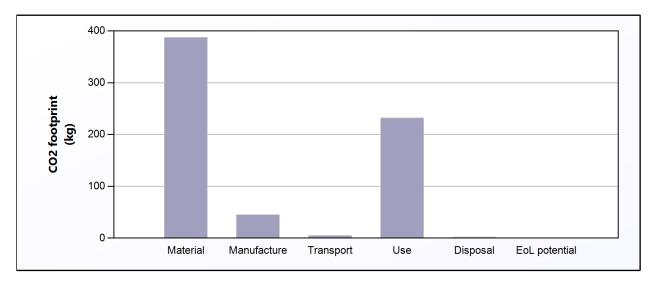
Notes:	Summa	ry

# ECES 2019

# **Eco Audit Report**

### **CO2 Footprint Analysis**

Summary



	CO2 (kg/year)
Equivalent annual environmental burden (averaged over 10 year product life):	67.3

# Detailed breakdown of individual life phases

Material: Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass processed** (kg)	CO2 footprint (kg)	%
Sheet metal	Carbon steel, AISI 1022, as rolled	Virgin (0%)	0.7	230	1.7e+02	3.9e+02	100.0
Total				230	1.7e+02	3.9e+02	100

<sup>\*</sup>Typical: Includes 'recycle fraction in current supply'

### Manufacture: Summary

Component	Process	% Removed Amount processed		CO2 footprint (kg)	%
Sheet metal	Roll forming	-	1.7e+02 kg	42	92.4
Sheet metal	Fine machining	5	8.5 kg	3.2	7.0
Galvanize	Electroplating	-	0.06 m^2	0.29	0.6
Total				46	100

<sup>\*\*</sup>Where applicable, includes material mass removed by secondary processes

Transport:

### Breakdown by transport stage

Stage name	Transport type	Distance (km)	CO2 footprint (kg)	%
Transport to customer	14 tonne (2 axle) truck	15	0.26	5.2
Costumer to end-user	40 tonne (6 axle) truck	5e+02	4.8	94.8
Total		5.2e+02	5	100

### **Breakdown by components**

Component	Mass (kg)	CO2 footprint (kg)	%
Sheet metal	1.6e+02	5	100.0
Total	1.6e+02	5	100

Use:

#### Static mode

Energy input and output type	Electric to mechanical (electric motors)
Country of use	World
Power rating (W)	5
Usage (hours per day)	24
Usage (days per year)	3.7e+02
Product life (years)	10

### Relative contribution of static and mobile modes

Mode	CO2 footprint (kg)	%
Static	2.3e+02	100.0
Mobile	0	
Total	2.3e+02	100

Disposal:

Component	End of life option	% recovered	CO2 footprint (kg)	%
Sheet metal	Landfill	100.0	2.3	100.0
Total			2.3	100

### **EoL** potential:

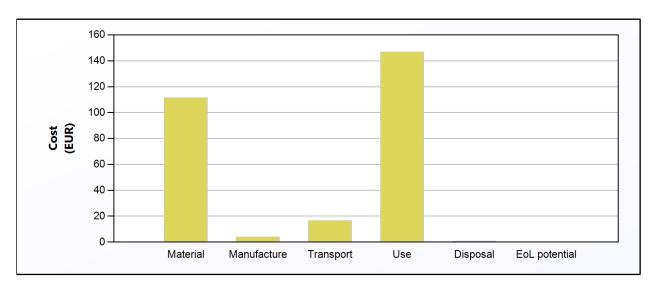
Component	End of life option	% recovered	CO2 footprint (kg)	%
Sheet metal	Landfill	100.0	0	
Total			0	100

Notes:	<u>Summary</u>



# **Eco Audit Report**

Cost Analysis Summary



	Cost (EUR/year)
Equivalent annual environmental burden (averaged over 10 year product life):	28

# Detailed breakdown of individual life phases

Material: Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass processed** (kg)	Cost (EUR)	%
Sheet metal	Carbon steel, AISI 1022, as rolled	Virgin (0%)	0.7	230	1.7e+02	1.1e+02	100.0
Total				230	1.7e+02	1.1e+02	100

<sup>\*</sup>Typical: Includes 'recycle fraction in current supply'

Manufacture: Summary

Country of manufacture World

Component	Process	Length (m)	% Removed	Amount processed		Cost (EUR)	%
Sheet metal	Roll forming	2	-	1.7e+02	kg	0.86	21.6
Sheet metal	Fine machining	-	5	8.5	kg	3.1	77.1
Galvanize	Electroplating	-	-	0.06	m^2	0.05	1.3
Total						4	100

<sup>\*\*</sup>Where applicable, includes material mass removed by secondary processes

Transport:

### Package dimensions

Height (m)	Width (m)	Depth (m)
2	1	0.025

### Breakdown by transport stage

Stage name	Transport type	Distance (km)	Cost (EUR)	%
Transport to customer	14 tonne (2 axle) truck	15	5	30.2
Costumer to end-user	40 tonne (6 axle) truck	5e+02	12	69.8
Total		5.2e+02	17	100

### Breakdown by components

Component	Mass (kg)	Cost (EUR)	%
Sheet metal	1.6e+02	17	100.0
Total	1.6e+02	17	100

Use:

#### Static mode

Energy input and output type	Electric to mechanical (electric motors)		
Country of use	World		
Fuel rate	Domestic		
Power rating (W)	5		
Usage (hours per day)	24		
Usage (days per year)	3.7e+02		
Product life (years)	10		

#### Relative contribution of static and mobile modes

Mode	Cost (EUR)	%
Static	1.5e+02	100.0
Mobile	0	
Total	1.5e+02	100

Disposal:

Component	End of life option	% recovered	Cost (EUR)	%
Sheet metal	Landfill	100.0	0.89	100.0
Total			0.89	100

Summary **Notes:**